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November 9, 2007

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NOV 23 2007

**OFFICE OF PETITIONS**



**Request For The Withdrawal Of The Holding Of Abandonment**

**Re: Application No. 10/694,620<sup>W</sup>**

**DEVICE AND METHOD TO ASSIST IN PUTTING ON TUBULAR GARMENTS OR COVERINGS, FOR EXAMPLE, SOCKS AND CONDOMS AND GOVES**

I should like to petition to have the holding of abandonment of the above patent withdrawn.

I responded to an office action by fax and included instructions for payment by VISA. As I was in the North Country in Canada at the time, I asked my son to forward the reply to office action (attached hereto) along with the appropriate form for payment by credit card. He sent both and they were received at the Patent Office.

Unfortunately, he lost his credit card the next week and had it replaced. I was not advised of this. He assumed the payment would be cleared immediately, but apparently it took several days, and by that time the credit card had been replaced. When the Patent Office actually processed the transaction, several days later, the credit card charge was refused by the credit card company.

I enclose a letter from the bank explaining what happened.

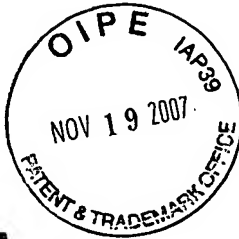
I would have sent this sooner; however I was ill this summer and my co-inventor, who suffers from Parkinson's disease, was unavailable to assist and I had some difficulty obtaining a letter from my son's bank.

We are both eager to have this patent go forward and have expended a great deal of effort making prototypes and meeting with orthopedic companies to market the device, which should be a boon to disabled people who have great difficulty dressing.

Please advise as to what other steps, if any, are required to have the holding of Abandonment withdrawn.

Yours truly

JDU



July 24, 2007

ANDREW B. UNSWORTH  
2193 DEYN COURT DR  
BURLINGTON ON L7R 1W2

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NOV 23 2007

OFFICE OF PETITIONS

Dear Andrew B. Unsworth,

**RE: Credit Card Number [REDACTED] 3760**

Thank you for your recent inquiry regarding your credit card.

As requested, we would like to confirm that the above-mentioned account number was cancelled as a lost card on September 5<sup>th</sup>, 2006, and was replaced with account number 4500 XXXX XXXX 9969. After this date, any attempts for authorizations made on the above account number would have been declined.

If you have any questions please contact us at 1-800-465-4653 (In Canada and the U.S.) or 514-861-4653 (from elsewhere). We value your business and trust you will continue to find that your CIBC credit card delivers the best in service and convenience.

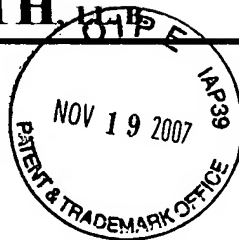
Sincerely,

Christina Kotsiaftis  
Customer Solution Manager  
CIBC Credit Card Services

**JOHN D. UNSWORTH**

November 9, 2007

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Commissioner for Patents  
P.O. Box 1450  
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Yours truly

A stylized handwritten signature consisting of the letters "JDU" in a bold, cursive-like font.

John D. Unsworth

July 12, 2006



Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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**NOV 23 2007**

**OFFICE OF PETITIONS**

Attention: Mr. Gary L. Welch      571 272 4996  
Examiner Art Unit 3765

**Re:            Application No. 10/694,620**

**DEVICE AND METHOD TO ASSIST IN PUTTING ON TUBULAR GARMENTS  
OR COVERINGS, FOR EXAMPLE, SOCKS AND CONDOMS AND GOVES**

Greetings:  
Re:

With respect the objections contained in the Office Action Summary.

**DRAWINGS**

1. I submit the objections to the drawings should be an objection to the text in the disclosure. "rolling up" found at page 7 line 16 should have read: "rolling up 3 the roll 4" formed in the tubular element 1

The first sentence of the second paragraph on page 7 of the disclosure read:

Other preferred embodiments incorporate both conventional springy materials, for example, steel, plastic or superlastic material which would be loaded up by rolling-up ((4)) 3 the roll 4 formed in the tubular elements 1; in combination with unconventional springy materials such

as Shape Memory Alloy (SMA) or other materials exhibiting shape recovery properties, that unload in the opposite direction.

Thus, the said first sentence of the second paragraph on page 7 of the disclosure should have read:

Other preferred embodiments incorporate both conventional springy materials, for example, steel, plastic or superlastic material which would be loaded up by rolling-up 3 the roll 4 formed in the tubular elements 1; in combination with unconventional springy materials such as Shape Memory Alloy (SMA) or other materials exhibiting shape recovery properties, that unload in the opposite direction.

With respect to the Examiner's second objection to the character "8" being used to designate both the "foot" and the "sock", I have changed the character "8" to the character 1a in the following 3 paragraphs that wrongly referring to the sock as "8" rather than 1a.

a) Line 12 Page 8 on original, and line 14 on the following excerpt:

material while the sock is unrolling to its fully extended wearable form. However when the SMA or similar material is heated, it would recover its coiled or rolled-up, memorized shape, which could be set strong enough to overcome the oppositely acting conventional springy element. The springy element made of the SMA or other similar material would then cause the sock to roll-up and off the wearer's foot. The rolled-up sock can then be temporarily constrained, by means described bellow, to maintain its torus like shape, even after the SMA returns, by cooling, to its floppy martensitic form, at which point the conventional springy material prevails, acting to otherwise un-roll the sock in the opposite direction, but for the temporarily imposed constraint. As mentioned the heating of the SMA or other similar material, could be effected by a number of different means, including a warm water bath or electrical resistive heating. This resistive heating can be effected by a battery and controller 2b attached to the sock (8) 1a, with power delivered to the springy elements 2a by conductors 2c, all as illustrated in Fig. 6. The

power supplied by it to the SMA material can be turned on and off by a switch 2d actuated by the wearers other foot or by pressing it against another object or by remote control means or other means well known to the art. This arrangement might of course be reversed so that the ~~convention~~ conventional springy material would act to roll out the socks and the SMA or other similar material would act in the opposite direction to roll-back the socks.

The said paragraph should have read:

material while the sock is unrolling to its fully extended wearable form. However when the SMA or similar material is heated, it would recover its coiled or rolled-up, memorized shape, which could be set strong enough to overcome the oppositely acting conventional springy element. The springy element made of the SMA or other similar material would then cause the sock to roll-up and off the wearer's foot. The rolled-up sock can then be temporarily constrained, by means described bellow, to maintain its torus like shape, even after the SMA returns, by cooling, to its floppy martensitic form, at which point the conventional springy material prevails, acting to otherwise un-roll the sock in the opposite direction, but for the temporarily imposed constraint. As mentioned the heating of the SMA or other similar material, could be effected by a number of different means, including a warm water bath or electrical resistive heating. This resistive heating can be effected by a battery and controller 2b attached to the sock 1a, with power delivered to the springy elements 2a by conductors 2c, all as illustrated in Fig. 6. The power supplied by it to the SMA material can be turned on and off by a switch 2d actuated by the wearer's other foot or by pressing it against another object or by remote control means or other means well known to the art. This arrangement might of course be reversed so that the conventional springy material would act to roll out the socks and the SMA or other similar material would act in the opposite direction to roll-back the socks.

b) Line 12 Page 12 on the original, line 12 on the following excerpt:

Fig. 1 illustrates two springy elements 2 connected to a tubular element 1 having a closed distal end and an open proximal end. Preferred embodiments of this invention also can have open distal ends and distal ends that can be opened and closed, which are often used in medical settings where access to the toes is required. Other example of open ended tubular elements 1 would be pant legs and shirt sleeves that are attached at their distal ends to the trunk of the pants and the trunk of shirts or coats. Another example of variations of tubular elements 1 is the sleeve and/or cuff of gloves 11, Fig. 12. However, most preferred embodiments have closed distal ends, and some such as condoms, require it. The tubular element 1 is illustrated as a straight tube, but it is to be understood that the tubular element can be any shape and come within the ambit of this invention. Socks ((8,)) 1a for example can be curved to accommodate the wearer's heel, or be straight as in heel-less socks. Both come within the ambit of this invention.

The said paragraph should have read:

Fig. 1 illustrates two springy elements 2 connected to a tubular element 1 having a closed distal end and an open proximal end. Preferred embodiments of this invention also can have open distal ends and distal ends that can be opened and closed, which are often used in medical settings where access to the toes is required. Other example of open ended tubular elements 1 would be pant legs and shirt sleeves that are attached at their distal ends to the trunk of the pants and the trunk of shirts or coats. Another example of variations of tubular elements 1 is the sleeve and/or cuff of gloves 11, Fig. 12. However, most preferred embodiments have closed distal ends, and some such as condoms, require it. The tubular element 1 is illustrated as a straight tube, but it is to be understood that the tubular element can be any shape and come

the loop 9 to push the sock off. While a loop is illustrated, other preferred embodiments have hooks and other means to assist in removing the socks.

d) I have amended the drawing Fig. 5, 7 and 10 to position character "8" to designate the "foot" rather than the ankle.

e) I have amended the drawing Fig. 10 to position character "10" to point to the "bracelet type ring"

I enclose a new page 3 of the drawings that includes fig. 10, marked "replacement sheet".

### **CLAIMS**

1. I request that Claim 1 be cancelled and replaced with the following claim:

1. A device comprised of a flexible tubular element 1, 1a to which is laminated, incorporated or intertwined, one or more springy elements, by connecting means such as adhesive, weaving, knitting or stitching, and

the springy element(s) are made of springy types of metal, plastic, superlastic nickel-titanium, other materials that exhibit sufficient springy qualities, or Shape Memory Alloys (SMA) or other material that exhibits shape recovery, or compositions thereof, and

said springy element(s) are loaded or further loaded, if preloaded, by being rolled-up with the tubular element to which they are attached, connected or incorporated, from the proximal end of the tubular element, in the direction of the distal end, to form an approximate torus shape, and in the case of Shape Memory Allow (SMA) or other material that exhibits shape recovery, the springy element(s) are rolled-up in their martensitic phase, or in the case of other materials that exhibit shape recovery, an analogous phase, and

restraining means, which may be composed of detachable attachments on the adjoining surfaces or extensions of the adjoining surfaces of the rolled tubular element, preferably



near the distal outside end of the tubular element, which when attached, restrain the loaded rolled-up tubular element from unloading and unrolling, prior to being detached, and

a body part may be inserted into or immediately adjacent to the inside distal end of the tubular element, while the tubular element is so restrained, and

when the restraining means are released such as when the detachable attachments are detached, the loaded and rolled-up springy elements unload and spring-back, causing the rolled-up flexible tubular element 1 to unroll, or in the case of the springy element being composed of Shape Memory Alloys (SMA) or other materials that exhibit shape recovery, before or after the detachable attachments are detached, the rolled-up part 4 of the tubular element 1, is heated, by such means as a hair dryer, resistive heating or a liquid bath, from the loaded martensitic state to its unloaded austenitic state, or in the case of other materials that exhibit shape recovery an analogous change of state, causing shape recovery of the springy element to spring-back, causing the rolled-up flexible tubular element 1 to unroll, and

the tubular element unrolls over the inserted body part, covering the said body part.

END OF CLAIM 1.

2. I request that Claim 2 be cancelled and be replaced with the following claim:

2. A device comprised of a flexible tubular element 1, 1a to which is laminated, incorporated or intertwined, one or more springy elements, by connecting means such as adhesive, weaving, knitting or stitching, and

the springy element(s) are made of springy types of metal, plastic, superlastic nickel-titanium, other materials that exhibit sufficient springy qualities, or Shape Memory

Alloys (SMA) or other material that exhibits shape recovery, or compositions thereof,  
and

additional springy elements are attached, connected or incorporated into the said tubular  
element 1, 1a that are made of Shape Memory Alloy (SMA) or other material that  
exhibits shape recovery, and

when the additional springy elements are at ambient temperature, they are in the  
martensitic state and are floppy, or analogous state, for other materials that exhibit shape  
recovery, and

original springy element(s) are loaded or further loaded, if preloaded, by being rolled-up  
with the tubular element to which they are attached, connected or incorporated, from the  
proximal end of the tubular element 1, in the direction of the distal end, to form an  
approximate torus shape, and

restraining means which may be composed of detachable attachments on the adjoining or  
extensions of the adjoining surfaces of the rolled tubular element 1, preferably near the  
distal outside end of the tubular element, which when attached restrain the loaded rolled-  
up tubular element from unloading and unrolling, prior to being detached, and

a body part may be inserted into or be placed immediately adjacent to the inside distal  
end of the tubular element while the tubular element 1 is so restrained, and

when the restraining means are released such as when detachable attachments are  
detached, the loaded and rolled-up original springy elements unload and spring-back, and  
overcome any resistance that the additional springy elements, which are floppy at  
ambient temperature, might put up, causing the rolled-up flexible tubular element to  
unroll, and

the tubular element unrolls over the inserted or immediately adjacent body part, covering the said body part, and

after the tubular element is unrolled by the unloading and spring-back of the original springy elements, and at such time that the wearer wishes to remove the said tubular element 1, 1a, by means such as a hair dryer or liquid bath, from the body part it covers, the wearer can apply sufficient heat to the additional springy elements, sufficient to effect shape recovery of a rolled-up shape, such that the recovery of such shape is sufficiently energetic that it overcomes the opposing force of the original springy element(s) causing the said tubular element to roll-up and off the inserted body part, thus removing the covering tubular element, and

perhaps after the said restraining means, such as detachable attachments are attached to restrain the tubular element from unrolling, the application of heat, by such means as a hair dryer or liquid bath, can be terminated, which causes the additional springy elements to relax to their martensitic state or analogous state, for other materials that exhibit shape recovery, and

the original springy elements can again prevail over the additional springy elements and cause the tubular element to unroll as soon as the said restraining means are released, such as when the detachable attachments restraining the coiled tubular element are detached.

END OF CLAIM 2.

3. I request that Claim 3 be cancelled and be replaced with the following claim:
3. A method of covering a body part with a covering that includes a tubular element 1 1a, or is composed of a tubular element 1, 1a and

the tubular element 1 is rolled-up, thereby loading a springy element which is laminated, incorporated or intertwined to the said tubular element 1, 1a by connecting means such as adhesive, weaving, knitting or stitching, and

once rolled-up or partly rolled-up, restraining means such as a detachably attaching restraining element(s) is detachably attached to prevent the loaded rolled-up or partly rolled-up tubular element 4 from unrolling until it is detached, and

the restraining means such as a detachably attaching restraining element that connect adjoining surfaces or extensions of the adjoining surfaces, one on the inside of the tubular element 1, 1a and the other on the outside of the same tubular element 1, 1a, preferably close to the distal exterior end of the tubular element 1, 1a, and

the wearer places the rolled-up 4 tubular element 1, 1a near the body part that he desires to have covered by the same tubular element 1, 1a and

the wearer places the desired body in the interior of, or immediately adjacent to the interior distal end of the tubular element 1, 1a,

the wearer then releases the restraining means such as when he detaches the detachably attaching restraining element(s), and

the wearer allows the rolled-up tubular element 4 to unroll onto that body part that he has placed in or immediately adjacent to the interior distal end of the tubular element 1, 1a.

END OF CLAIM 3

NOTES TO CLAIMS 1, 2, AND 3:

1. The amended claims 1, 2, and 3 now specify examples of means by which the springy elements are connected to the tubular element 1, 1a. as requested by the

examiner. It is respectfully submitted that an exhaustive list of attachment methods is not required as these means are well known to the art.

2. The claims 1,2, and 3 have been limited to springy types of metals plastics
3. Shape Memory Alloys (SMA)'s are well known to the art of metallurgy and exhibit shape recovery and superlastic characteristics, both concepts being well understood by metallurgists. Likewise, superlastic nickel-titanium is well known to the art of metallurgy. It is a material that exhibits 6 to 7% strain without yielding, and exerts an approximate constant force on recovery. Superlastic Nickel-Titanium is a type of Shape Memory Alloy (SMA).
4. The specification refers to SMA materials and superlastic materials. See Page 6 of the specification.
5. With respect to the examiner's objection that Claim 1 does not include a structure which allows for the transformation of the springy element made of Shape Memory Alloy (SMA), from its Martensitic (loaded) phase to its austenitic (unloaded) phase :  
  
No structure is required. The material itself exhibits this phased change upon heating by such methods as a hair dryer or liquid bath. This transformation and the accompanying shape recovery is well understood to metallurgists familiar with the art.
6. With respect to the examiner's objection that the size and dimensions of the springy element are not specified, it is submitted that these will depend upon the particular application and the resistance of the tubular element 1, 1a to roll-up and roll-out.

#### **CLAIM REJECTIONS 85 USC SS102**

With respect to the examiner's objection to the prior art, Piotti (U.S. 5,606,982). The said Piotti patent does not teach a method whereby a condom can unfurl automatically, after a restraining means is released, as in the patent being examined. The condom is stretched radially over an annular device, which has an inside diameter which is larger than the diameter of the penis. This allows the

device and attached rolled condom to easily be mounted on the penis. Once the device and attached condom are mounted on the end of the penis, the device is moved, by the operator, for the head of the penis (the initial position) to the base of the penis (the final position). This causes the condom to unfurl, but only in response to the force applied by the operator in sliding the arrangement from the initial to the final position. This patent being examined dispenses with the annular device completely. The condom is not loaded in a radial direction, but rather the springy element is loaded longitudinally along the length of the condom, or more generally, along the length of the tubular element 1, 1a. The patent being examined teaches a method whereby the condom or tubular element 1, 1a, can automatically unfurl itself, after the initial restraining means are removed, without further intervention by the operator. The Piotti condom does not unfurl itself, but requires the force of the operator. The only advantage of the Piotti method over the unassisted method is that the condom is radially expanded by the annular device, allowing the penis to be inserted easily into the lumen formed in the condom.

I trust these amendments meet the examiner's objections to the patents submitted.

Yours truly

A stylized handwritten signature consisting of the letters 'JDU' in a bold, cursive-like font.

John D. Unsworth

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